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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/238,859	01/28/1999	ULRICH SIMON	GK-ZEL-3039	5760

26418 7590 06/19/2002

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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT PAPER NUMBER

2859

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 18

Application Number: 09238859

Filing Date: January 01, 1999

Appellant(s): Ulrich Simon et al.

MAILED
JUN 18 2002
GROUP 2800

Daniel P. Lent

For Appellant

Art Unit: 2859

EXAMINER'S ANSWER

This is in response to the appeal brief filed on April 02, 2002.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 2, 4-9 are pending.

Claims 2, 4-8 are rejected.

Claim 9 is now allowed.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

6) *Issues*

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The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

A) The following issues are no longer applicable since the Examiner has withdrawn the respective rejections:

- a) Rejection under 35 U.S.C. 112, first paragraph, of claims 2, 4-9,
- b) Rejection under 35 U.S.C. 103(b), of claim 9.

B) The only remaining issue is: whether claims 2, 4-8 are obvious in view of a combination of the admitted prior art on pages 1-2 of the specification and Kemeny, U.S. 5,039,855 under 35 U.S.C. 103(a).

(7) *Grouping of Claims*

Applicant provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

Admitted prior art as stated in pages 1-2 of the specification [hereinafter Prior Art],

U.S. patent No. 5,039,855, August 13, 1991, by Kemeny et al. [hereinafter Kemeny].

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 2, 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior Art as stated by applicant in pages 1-2 of the specification [hereinafter Prior Art] in view of Kemeny et al. (U.S. 5039855) [hereinafter Kemeny].

Prior Art discloses a laser scanning microscope with an AOTF, particularly the need to avoid temperature fluctuations when using the AOTF.

Prior Art does not disclose a temperature gauge provided in the environment of the AOTF, a heater controller to control the AOTF temperature at a constant value.

Kemeny discloses in Figs. 6-8 a device to control an AOTF comprising an AOTF 102, a heater (one of cooling and heating) 164, a temperature sensor (gauge) 167, 170 connected to a heater controller (regulator) 166 and located within the vicinity of the AOTF. The heater is capable of maintaining the temperature of the AOTF within 1 degree of the desired temperature which is above 35 degree (col. 8, lines 16-19), therefore, the heater controller, in a broad sense, regulates the temperature of the AOTF to a constant value. Output lines 190a and 190b are carrying a signal from the temperature sensors to a controller (driving unit) 300. Cooling of the AOTF is achieved simply by shutting the heater off (entire col. 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a temperature sensor, a heater and a heater regulator, as taught by Kemeny, to the device with the AOTF disclosed by the Prior Art in order to be able to provide corrections for variations in the temperature of the AOTF, as already suggested by Kemeny (col. 13, lines 33-34).

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(11) Response to Arguments

- A) Appellant states that Kemeny uses a spectrometer wherein "frequency control by means of varying temperature control is required so that the spectral range be varied through purposeful changes of temperature". This argument is not persuasive because, although Kemeny uses the AOTF with a spectrometer, the spectrometer is not an issue, since Kemeny is only used to show that a heating / cooling controller, which responds to a signal from a temperature sensor, is used to control the temperature of the environment where the AOTF is located in order to eliminate noises. Therefore, it is clear from Kemeny that when using an AOTF it is desirable to control the temperature of the environment where it is located in order to eliminate noise which may affect the accuracy of the measurements, thus, providing the necessary suggestion of one of ordinary skill in the art for using a temperature control of the environment where an AOTF is used.
- B) Appellant states that the device claimed by applicant (microscope) is different from the device disclosed by Kemeny (spectrometer) and thus, can not be combined. This argument is not persuasive because the spectrometer and the microscope are not being combined. It is Kemeny's teaching that a temperature sensor and a heating/ cooling controller are needed when using an AOTF that is used to modify the Prior Art.
- C) Appellant states that the temperature in Kemeny's reference is not kept constant. This argument is not persuasive because Kemeny states in col. 13, lines 32-43, that the controller can maintain the temperature within $\pm 1^{\circ}$ Celsius. This is the same temperature error range described by appellant as "constant" in page 2 of the specification, and thus, Kemeny is considered to teach keeping the temperature of the AOTF constant.


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For the above reasons, it is believed that the rejections under 103(a) of claims 2, 4-8 should be sustained.


Respectfully submitted,


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Appeal Conference Date: June 12, 2002



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